Franz M. Enzinger: His Life and Work

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There was never any question in Franz Enzinger’s mind he would become a doctor. Growing up the younger of two children in Austria, he remembers fondly his family physician and the great admiration he had for the gentleman. That and the generous support from his father, a government worker and his mother a dedicated homemaker conspired to make his path to medicine more of a calling than a conscious decision. However, World War II interrupted his studies and he found himself working as a medical orderly in the German army. It was from a radar station in Cherbourg that he, a mere 20 year old, witnessed the Normandy invasion on that fateful day in June of 1944 knowing it might be his last. Fortunately, with the conclusion of the war he was both alive and able to return to medical school at the University of Innsbruck where he gravitated toward anatomy and histology and eventually became an anatomy instructor there. He arrived in the United States in 1951 to take a rotating internship at Northern Westchester Hospital, a position he had learned about from a colleague. Following this year he decided he would like to do a pathology residency under the illustrious Arthur Purdy Stout. He recalled that Dr. Stout was “very nice to him” during the interview but ultimately did not accept him. Instead, he went to the University of Iowa where he trained under the late Dr. Emory Warner, who later described his appointment of Franz Enzinger as the best decision he ever made as departmental chair.
It was his friend Jim Butler, a hematopathologist, who convinced Franz he should apply to the Armed Forces Institute of Pathology, a recreation of the old Army Medical Museum staffed by the best diagnosticians in a new building situated on the grounds of the Walter Reed Army Medical Center. Although the AFIP was created as a consultation center for the military, it soon became a consultation center for the world. On his arrival in 1957 he was assigned to the Pulmonary, Mediastinal, ENT Branch headed by Dr. Samuel Rosen. During that first year he participated in the classic description of pulmonary alveolar proteinosis along with Drs. Rosen, Castleman, and Liebow. In his second year he found himself in Dr. Helwig’s Dermatopathology/Gastrointestinal Branch and in his third year the Department of Soft Tissue Pathology where he became chair after a mere 18 months (at the age of 37) when the former chair, Dr. Winslow, decided to leave. This appointment marked the beginning of Franz’s illustrious career in soft tissue pathology, for here, drawing on his remarkable visual abilities and the unparalleled archives of the Institute, Franz wrote prodigiously on nearly every known soft tissue lesion as well while describing many new ones.

His first major work was “Liposarcoma: A study of 103 cases,” in which he drew sharp lines among the various histologic subtypes and illustrated the close correlation between subtype and behavior in that disease. The clairvoyance of his opening stating that the subtypes of liposarcoma should be regarded as groups of closely related tumors rather than as one disease presages by nearly 30 years the molecular classification of liposarcoma which firmly validated all the principles in that paper. Over the next 10 years nearly every paper he wrote became a classic such as: musculoaponeurotic fibromatosis of the shoulder region, proliferative myositis, and juvenile aponeurotic...
fibroma to name a few. In “Alveolar Rhabdomyosarcoma: an analysis of 110 cases.”
Franz called attention to the fact that nearly one half of cases contained “solid or medullary” areas which closely resembled lymphoma. This fact seemed largely forgotten until modern classifications re-emphasized the solid variant of alveolar rhabdomyosarcoma. However, it was his next two major papers that clearly established him as one of the most original surgical pathologist—one who had the capacity to recognize lesion which others had never seen or had seemingly overlooked. In his paper on clear cell sarcoma of tendon and aponeurosis published in 1965 he described a distinctive clear cell tumor of the distal extremities which he pointed out was neither a classic synovial sarcoma nor a malignant melanoma. Interestingly, although he observed the presence of Fontana positive pigment within the lesion, he chose to interpret it as hemosiderin, probably accounting for the relative ease with which he concluded that these tumors were not melanomas. Of all his papers epithelioid sarcoma paper probably stands as his masterpiece. Written with great detail and precision, illustrated with great beauty and buttressed with follow up information, this paper describes a lesion which virtually no one was aware of at the time of its publication, yet many would recall a probable case from the past. Even today, no one has improved on the fundamental description laid out by Franz in that 1970 publication. It was no wonder that Richard Reed dubbed the tumor a “franzoma.” Yet in his usually modest way, when I asked him if he thought his epithelioid sarcoma was his finest paper, he said, “It was good.”

It was during this period of incredible productivity that Franz was also asked to direct the First World Health Organization for the Classification of Soft Tissue Tumors. His committee consisted of a panel of international experts who not only produced the first

The First WHO Committee for the Classification of Soft Tissue Tumors c. 1960-62
Franz is seated at the head of the table
“Blue Book” but also a magnificent set of glass slides with accompanying syllabus. He magnanimously gave sets to visiting residents and scientists at the AFIP and distributed many world wide, a gesture that accounted for the rapid assimilation of this first classification. I still have and cherish the set he gave me.

With the publication of the “Blue Book,” Franz quickly became the leading diagnostic soft tissue pathologist of his generation. His earlier papers were followed by several other classics including “Fetal Rhabdomyoma,” a paper co-authored with Peper Dehner, then a young pathologist at the AFIP, “Extraskelatal myxoid chondrosarcoma: an analysis of 34 cases,” “Malignant Giant Cell Tumor of Soft Parts,” a tumor subsequently to become part of the spectrum of malignant fibrous histiocytoma, “Proliferative fascitis,” co-authored with his long time collaborator Ed Chung, Hemangiopericytoma,” and “Extraskelatal neoplasm resembling Ewing’s sarcoma,” which he wrote with his long time Swedish friend, Lennert Angervall. “Spindle Cell Lipoma” and the closely related “Pleomorphic Lipoma,” were clearly identified as benign lesions the latter of which had probably been diagnosed as a liposarcoma for many years. A series of publications in the 1970’s and 80 led to the concept of intermediate fibrohistiocytic tumors. These included the giant cell fibroblastoma a lesion, a lesion correctly identified as a variant of dermatofibrosarcoma protuberans years before the characteristic ring chromosome linked them to one another, “Angiomatoid Malignant Fibrous Histiocytoma: a Distinct Fibrohistiocytic Tumor of Children and Young Adults simulating a vascular neoplasm,” and “Plexiform fibrohistiocytic tumor presenting in children and young adults: an analysis of 65 cases” Interestingly, although all of these papers obviously relied heavily on Franz’s insights, he was always generous including others in these efforts even when he himself had to do much of the work.
By the time I had finished my residency and brief tenure as a faculty member at the Johns Hopkins Hospital in nearby Baltimore, there seemed no better place to train than at the AFIP with Franz Enzinger even though it entailed a 100 mile round trip commute on a daily basis. It was 13 year association I have never regretted. During this time we published two major articles on malignant fibrous histiocytoma, “Myxoid malignant fibrous histiocytoma”\textsuperscript{21} and “Malignant Fibrous Histiocytoma: An analysis of 200 cases.”\textsuperscript{22} which have been both embraced and dismissed over the years. The importance in these articles, I have always maintained, was not to support the concept of the histiocytic origin of these pleomorphic sarcomas but rather to detail their behavior as it relates to the parameters of size and depth. In fact, Franz and I had vastly different ideas about the origin or differentiation of these lesions. We fought for weeks over this issue. It seemed we were not destined to finish the paper. Finally, to compromise we concluded with the statement that these tumors showed “partial histiocytic and fibroblastic differentiation.” Fortunately, writing the first edition of our textbook \textit{Soft Tissue Tumors}\textsuperscript{23} led to far fewer disputes. Franz afforded me great latitude in this endeavor. He assigned me one half the chapters and generously granted me one half of the royalties as well, something I have long remembered.

It was a very sad day in October 1987 when Franz announced his intention to retire from the AFIP. He was barely 64, far younger than many other chairs such as Drs. Mostofi and Helwig who desperately tried to convince him to reconsider his decision. When I asked him why he chose such an early retirement he said, “I want to retire when everyone still thinks I am great.”

![The Soft Tissue Department Franz’s Retirement Ceremony 1988](image)
Although he remained true to his intentions, he returned often over the ensuing years as a consultant to assist the department under the new leadership of Jeanne Meis-Kindblom and later Markku Miettinen. Even at this point in his career he continued his mentoring. He co-authored with Jeanne Meis-Kindblom and others in the department several important papers including “Inflammatory Fibrosarcoma of the Mesentery and Retroperitoneum: a Tumor Closely Simulating Inflammatory Pseudotumor,” an important early description of the inflammatory myofibroblastic tumor.

Franz has been truly one of the most remarkable individuals to cross my path during my career as a pathologist. From his own career one can learn much. He was an individual who always remained focused on his work and the pursuit of excellence. He had little regard for the politics of pathology and probably for that reason had no enemies. He once admonished me to “pay attention to pathology and not the personalities in pathology.” He insisted it was better to write one excellent paper than 12 mediocre ones. His own curriculum vitae had about 75 papers when he retired, but each was a classic. He was kind and generous to other pathologists. I once asked him why he took so long to look at slides which others brought him when I knew how easy the cases must have been for him—because he wished them to think he, too, had struggled over the case, he said. He had calm perspective on life once telling me that if he had a sarcoma he would not venture to a major medical Mecca, but rather Tahiti for a long vacation. He has always enjoyed life to the fullest in the companionship of his lovely wife Inge, a former Fulbright Scholar, whom he married over 40 years ago and his son Peter, a medical oncologist at Brigham and Women’s Hospital in Boston. It is, indeed, a privilege for our society to honor this man who has meant so much to our discipline and for me personally to acknowledge how influential he has been to my life and career.
References:


